

Title (en)

APPARATUS AND METHOD FOR DETERMINING THE LOCATION OF A MOBILE DEVICE USING MULTIPLE WIRELESS ACCESS POINTS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR STANDORTBESTIMMUNG EINER MOBILEN VORRICHTUNG UNTER VERWENDUNG MEHRERER DRAHTLOSZUGANGSPUNKTE

Title (fr)

APPAREIL ET PROCÉDÉ DE DÉTERMINATION DE L'EMPLACEMENT D'UN DISPOSITIF MOBILE À L'AIDE DE PLUSIEURS POINTS D'ACCÈS SANS FIL

Publication

EP 3100069 A1 20161207 (EN)

Application

EP 15701418 A 20150126

Priority

- GB 201401579 A 20140130
- GB 2015050168 W 20150126

Abstract (en)

[origin: WO2015114313A1] A method and apparatus are provided for determining the location of a mobile device using multiple wireless access points, each wireless access point comprising multiple antennas. The method comprises receiving a communication signal from the mobile device at said multiple antennas of said multiple wireless access points. For each wireless access point, angle-of-arrival information of the received communication signal at the wireless access point is determined, based on a difference in phase of the received signal between different antennas. The determined angle-of-arrival information for the received communication signal from the mobile device is then collected from each of the multiple wireless access points, and the location of the mobile device is estimated from the collected angle-of-arrival information. The determining of the angle-of-arrival information for a wireless access point includes compensating for a non-zero elevation of the mobile device with respect to the wireless access point.

IPC 8 full level

G01S 3/48 (2006.01); **G01S 5/04** (2006.01)

CPC (source: EP US)

G01S 3/48 (2013.01 - EP US); **G01S 5/02213** (2020.05 - EP US); **G01S 5/0278** (2013.01 - EP US); **G01S 5/04** (2013.01 - EP US); **G01S 5/06** (2013.01 - US); **H04W 64/006** (2013.01 - EP US)

Citation (search report)

See references of WO 2015114313A1

Cited by

WO2021136985A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015114313 A1 20150806; EP 3100069 A1 20161207; GB 201401579 D0 20140319; US 2016334498 A1 20161117

DOCDB simple family (application)

GB 2015050168 W 20150126; EP 15701418 A 20150126; GB 201401579 A 20140130; US 201515112264 A 20150126